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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/619,478	07/19/2000	Shunpei Yamazaki	0756-2187	1882

22204            7590            10/22/2002

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EXAMINER

ANYASO, UCHENDU O

ART UNIT

PAPER NUMBER

2675

DATE MAILED: 10/22/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/619,478	YAMAZAKI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Uchendu O Anyaso	2675	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 18 July 2002.
- 2a) This action is FINAL.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-26 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a)  The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>10</u> . | 6) <input type="checkbox"/> Other: _____                                     |

## DETAILED ACTION

1. **Claims 1-26** are pending in this action.

### ***Claim Rejections - 35 USC ' 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. **Claims 1, 2, 4-7, 9-18, 20-23, 25 and 26** are rejected under 35 U.S.C. 102(e) as being anticipated by Sawada (U.S. 6,078,317).

Regarding independent **Claims 1, 6, 11, 14, 17 and 22**, Sawada teaches a ferroelectric liquid crystal display (4) (column 3, lines 38-40, figure 1 at 4).

Furthermore, Sawada teaches an image signal processing circuit by teaching a video signal processor (2) and digital image processor (3) (column 3, lines 38-40, figure 1 at 2).

Also, Sawada teaches a control circuit in the form of a display mode dependence controller (17) for setting the gamma characteristic adjustment circuit (19) that is contained within the digital image processor (figure 1 at 2-4).

Furthermore, Sawada teaches that the gamma characteristic adjustment circuit (19) adjusts the characteristics included in the RGB image data in correspondence with

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the display panel (24) by utilizing a look-up table embedded within the gamma characteristic adjustment circuit (19) (column 4, lines 10-24, figure 1 at 19, 24).

Regarding **Claims 2, 5, 7, 10, 12, 13, 15, 16, 18, 21, 23 and 26**, in further discussion of claims 1, 6, 11, 14, 17 and 22, Sawada teaches a ferroelectric liquid crystal display (4) for a computer display (see column 3, lines 38-40, figure 1 at 4, see also column 1, lines 1-19).

Regarding **Claims 4, 9, 20 and 25**, in further discussion of claims 1 and 6, 17, 22, Sawada teaches circuitry wherein the video signal processor and the digital image processor contain the A/D conversion circuit (13) and the gamma characteristic adjustment circuit (19) respectively (column 3, lines 61-67 through column 4, lines 10-24 figure 1 at 13, 19).

#### ***Claim Rejections - 35 USC ' 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 3, 8, 19 and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Sawada* (U.S. 6,078,317) in view of *Jeong* (U.S. 6,008,801).

Regarding **Claims 3, 8, 19 and 24**, in further discussion of claims 1, 6, 17 and 22, *Sawada* teaches circuitry wherein the video signal processor and the digital image processor contain the A/D conversion circuit (13) and the gamma characteristic adjustment circuit (19) respectively (column 3, lines 61-67 through column 4, lines 10-24 figure 1 at 13, 19). However, *Sawada* does not teach a source driver circuit with a D/A conversion circuit. On the other hand, *Jeong* teaches an invention related to a source driver for a thin film transistor liquid crystal display, which has a digital-to-analog converter (column 1, lines 10-14).

Thus, it would have been obvious for a person of ordinary skill in the art to combine *Sawada* and *Jeong*'s inventions because while *Sawada* teaches circuitry wherein the video signal processor and the digital image processor contain the A/D conversion circuit (13) and the gamma characteristic adjustment circuit (19) respectively, *Jeong* teaches a source driver for a thin film transistor liquid crystal display which has a digital-to-analog converter. The motivation for combining these inventions would have been to reduce the power consumption of the source driver, and thus, reduce the power consumption of the liquid crystal device (column 4, lines 1-5).

#### ***Response to Arguments***

6. Applicant's arguments filed July 18, 2002 have been fully considered but they are not persuasive.

Applicant argues that the method and apparatus of his invention requires a control circuit that controls the display panel and image signal processing circuit.

Applicant then states that this is different from Sawada in that teaches a control circuit in the form of a display mode dependence controller (17). Examiner disagrees with applicant in that applicant may not have fully read the teaching of Sawada.

Firstly, Sawada teaches a control circuit in the form of a display mode dependence controller (17) which controls the scanning control circuit (22) within the digital image processor (3) (see figure 1 at 17, 3, 22). This shows how the controller (17) controls an image processing circuit.

Secondly, the scanning control circuit (22) in turn controls the display controller (23) that controls the FLCD panel (24) of the display unit (24) (figure 1 at 4, 22-24). This also shows how the controller (17) controls the display panel via the scanning control circuit (22).

Thus, the connectivity of the circuitry as taught by Sawada clearly anticipates applicant's claimed invention. This renders applicant's arguments non-persuasive.

### ***Conclusion***

**7. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uchendu O. Anyaso whose telephone number is (703) 306-5934. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras, can be reached at (703) 305-9720.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

  
Uchendu O. Anyaso

10/18/2002

  
STEVEN SARAS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600